

LISTING OF CLAIMS

1.(Original) A method of making a balanced self-cleaning singulation saw blade, comprising the step of:

5 preparing a mandrel or form having contours with the shape of a desired saw blade,
 placing the mandrel in a depositing solution to receive friable particles and a deposited metal binder,
 depositing a continuous metal and friable
10 particle saw blade on the mandrel greater than the desired thickness of the saw blade,
 removing the saw blade from the mandrel,
 grinding one side of the saw blade to obtain parallelism and to grind away protruding friable particles.

2.(Original) The method as set forth in claim 1 which further includes the step of electro polishing to expose cutting edges, and

5 masking portions of the saw blade that are not to be electro polished.

3.(Original) The method as set forth in claim 2 wherein the step of masking comprises masking the sides and exposing the outside diameter to electro polishing.

4.(Amended) The method as set forth in claim 3 wherein the step of electro polishing the outside diameter exposes up to fifty percent of said friable particles.

5.(Original) The method as set forth in claim 3 wherein the step of masking comprises depositing an anti-friction layer on the sides of the saw blade.

6.(Original) The method as set forth in claim 1 wherein the step of depositing a continuous metal and friable particle saw blade comprises electro depositing

nickel and controlled amounts of friable particles while
5 electroplating.

7.(Original) The method as set forth in claim 6
wherein the step of electroplating a continuous nickel and
friable particle saw blade comprises depositing controlled
amounts of large friable particles in the center of the saw
5 blade and small particles on the sides of the saw blade.

8.(Original) The method as set forth in claim 6
wherein the step of electroplating a continuous nickel and
friable particle saw blade comprises depositing five to 150
micron friable particles.

9.(Original) The method as set forth in claim 6
wherein the step of electroplating a continuous nickel and
friable particle saw blade comprises depositing 40 micron
to 75 micron friable Cubic Boron Nitride (CBN).

10.(Original) A method of making a grindable
self-adjusting singulation saw for sawing semiconductor
packages containing hard and soft metals and plastic,
comprising the steps of:

5 depositing binder metal on a form to provide
an annular saw blade,

encapsulating in the metal being deposited
grindable super abrasive particles softer than natural
diamonds to provide a grindable abrasive impregnated metal
10 saw blade,

said grindable super abrasive particles
comprising friable synthetic Cubic Boron Nitride (CBN),
and/or garnet sapphire, silicon carbide, tungsten carbide,
cubic zircon, or the like,

15 grinding one or more sides of the saw blade
to balance and true the saw blade, and

removing the annular saw blade from the form
ready for use.

11. (Original) The method as set forth in claim
10 which further includes the step of balancing and truing
the saw blade by electro polishing sides of the annular saw
blade to expose grindable particles and super abrasive
5 particles, and

truing the outer diameter to a square
balanced shape.

12. (Original) The method as set forth in claim
10 wherein the step of depositing metal comprises nickel.

13. (Original) The method as set forth in claim
10 which further includes encapsulating a controlled amount
of anti-friction particles in the sidewall of the saw blade
to create an anti-friction barrier.